

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,750	07/23/2001	Charles M. Patton	10007237-1	4995
7590 03/13/2007 HEWLETT-PACKARD COMPANY			EXAMINER	
Intellectual Proj	perty Administration		DAVIS, ZACHARY A	
P.O. Box 272400 Fort Collins, CO 80527-2400			ART UNIT	PAPER NUMBER
,	•	•	2137	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		03/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
	09/911,750	PATTON ET AL.			
Office Action Summary	Examiner	Art Unit			
	Zachary A. Davis	2137			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	I. ely filed the mailing date of this communication. O (35 U.S.C. § 133).			
Status		,			
 Responsive to communication(s) filed on <u>20 Description</u> This action is FINAL. 2b) This Since this application is in condition for allowant closed in accordance with the practice under Exercise. 	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-15 and 21-46 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-15 and 21-46 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the oath or declaration is objected to by the Examiner	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119	· ·				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 20061002.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

Art Unit: 2137

DETAILED ACTION

1. A response was received on 20 December 2006. By this response, Claims 1 and 15 have been amended. No claims have been added or canceled. Claims 1-15 and 21-46 are currently pending in the present application.

Response to Arguments

2. Applicant's arguments filed 20 December 2006 have been fully considered but they are not persuasive.

Claims 1-15 were rejected under 35 U.S.C. 101 as directed to non-statutory subject matter. Claims 1-15, 21-35, and 37-46 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wiser et al, US Patent 6385596, in view of Fujiwara, US Patent Application Publication 2001/0054081, and Stefik et al, US Patent 6233684. Claim 36 was rejected under 35 U.S.C. 103(a) as being unpatentable over Dwork et al, US Patent 6038316, in view of Fujiwara and Stefik.

Regarding the rejection under 35 U.S.C. 101, Applicant asserts "that claim 1 consists of a combination of data structures and a digital processor which operates a computer program which impart functionality when employed as a computer component" (page 11 of the present response). However, the Examiner notes that this is a mere allegation, as Applicant has not stated what data structures are present in the claims, where a data structure is defined as set forth in MPEP § 2106.01, namely, as "a

Art Unit: 2137

physical or logical relationship among data elements, designed to support specific data manipulation functions", nor has Applicant stated what functionality is imparted by any alleged data structures. There is clearly not a physical relationship between the data elements; although the string is "embedded" within the file, this is not an actual physical embedding but a conceptual arrangement where the information of the string is included within the information of the file. There is also not a clear logical relationship between the data elements, and there is no specific data manipulation function that the file with the embedded string performs or supports. Although the claim recites that the string was embedded in the file, this embedding occurred previously, and is not a function that the file and/or string perform or would enable to be performed. Therefore, the digital file and digital string, while they may have "independent value" and "latent value", respectively, as claimed, do not clearly provide for performing any particular data manipulation function; nor does the combination or arrangement of the file and string, particularly the embedding of the string within the file, appear to provide for performing any data manipulation function.

In response to Applicant's request for an explanation of what the Examiner considers a functional interrelationship to be, the Examiner notes that, as per Office policy, a functional interrelationship would be defined if the claimed data, in conjunction with any claimed hardware, would realize a specific data processing function. An example of this would be computer code that included instructions for performing a particular method, where the code was stored on a disk or other computer readable medium, so that when the code was executed on a computer by reading the disk, the

Art Unit: 2137

method would be performed. This would be a specific function to be performed, and the relationship between the code itself and the computer's hardware and software components would be a structural and functional relationship. See MPEP § 2106.01 (and particularly MPEP § 2106.01 l).

Applicant further asserts "that using a digital processor to obtain a preexisting digital file ... and obtain a digital string from a purchaser ... and then embed the digital string from the purchaser in the preexisting digital file ... is per se functional material" (see page 12 of the present response). The Examiner agrees that if, for example, instructions that when executed by a processor actually performed the asserted steps of obtaining and embedding as described by Applicant, then that would constitute functional descriptive material. The Examiner notes that Claim 21 is directed to a method that includes substantially similar steps that are performed. Because Claim 21 is directed to a method, and therefore the steps are performed and produce a useful, concrete, and tangible result, Claim 21 is considered to be directed to statutory subject matter. However, the Examiner notes that instructions that perform the steps described above are not what is claimed in Claims 1 and 15. In contrast, Claims 1 and 15 are directed to the arrangement of the pieces of data that would result from such a method, rather than providing that functionality themselves. There does not appear to be any function recited that the arranged pieces of data (the file and embedded string) perform themselves.

Regarding the rejections under 35 U.S.C. 103(a), and particularly in reference to independent Claims 1, 15, 21, 37, 44, and also 36, Applicant argues that there is no

Art Unit: 2137

"mention or suggestion of including provider information in the watermark" in Stefik (see pages 13-14 of the present response). First, this is not what is claimed; rather, the embedded data consists of information of the purchaser. Further, the Examiner believes that Stefik does disclose that the watermark (i.e. embedded data) can include both provider and purchaser information, in contrast to Applicant's assertion that Stefik teaches away from using personal information of the purchaser (see page 14 of the present response). Although, as cited, Stefik does state "watermark data typically provides information relating to the owner of a document, the rights associated with that copy of the document and information relating to the rendering (e.g. when and where the document was printed)" (Stefik, column 3, lines 31-35, as cited by Applicant at page 14 of the present response), this does not exclude the watermark data from including information relating to the purchaser or end user. The Examiner notes the use of the word "typically", which implies that the listed items of information are intended as nonlimiting examples of what is included in the watermark data. Further, the Examiner notes that the information relating to the rendering does, in fact, relate to the purchaser or end user (as evidenced by column 1, lines 55-60, where information about the rendering event can be used to trace the source of a copy). Additionally, the Examiner notes that Stefik explicitly describes that watermarks can also include information about the end user (see, for example, column 1, lines 46-65, where a "fingerprint" carries information about an end user and a fingerprint can be included in the same mark as a watermark: see also column 10, lines 50-52, and column 12, lines 28-35). Therefore,

Art Unit: 2137

the Examiner believes that Stefik does in fact suggest, and does not teach away from, using information about the purchaser in the watermark or embedded data.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation was as cited in the previous Office action, namely to increase robustness of the embedded data; that is, even if the visible string(s) is/are somehow removed, the invisible one(s) would remain and still allow control of the digital rights (see Stefik, column 8, lines 55-56).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Art Unit: 2137

Therefore, for the reasons detailed above, the Examiner maintains the rejections as set forth below.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-15 are directed merely to an arrangement of data, although stored in a processor readable medium. Specifically, the independent claims recite a digital file and a digital string arranged as embedded within the file. An arrangement of data is non-functional descriptive material, which is not statutory subject matter even if stored in a computer-readable medium. See MPEP § 2106.01.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 2137

6. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites "the digital processor of said provider system" in line 8 of the claim. There is insufficient antecedent basis for this limitation in the claim. Although the claim itself is directed to a "digital processor", there is no indication that the claimed processor is a part of a provider system. Further, there is no antecedent basis for the claimed provider system necessarily having a digital processor. This renders the claim indefinite.

Similarly, Claim 15 recites "the digital processor of said provider system" in lines 6-7 and 9-10 of the claim. There is insufficient antecedent basis for these limitations in the claim for similar reasons as described above in reference to Claim 1.

Claims not specifically referred to above are rejected due to their dependence on a rejected base claim.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2137

8. Claims 1-15, 21-35, and 37-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wiser et al, US Patent 6385596, in view of Fujiwara, US Patent Application Publication 2001/0054081, and Stefik et al, US Patent 6233684.

In reference to Claim 1, Wiser discloses valued content in a computer readable-medium including a digital file having independent value to a provider (column 6, lines 48-52) and a digital string having a latent value to a purchaser embedded in a passport that is linked to the digital file (column 8, lines 53-56, where the string is personal information). However, although Wiser discloses that the string is embedded in the passport linked to the file (column 6, lines 44-46), Wiser does not explicitly disclose also embedding the personal information in the file itself.

Fujiwara discloses a system for content delivery in which personal data is embedded in a delivered digital file (page 4, paragraph 0047; page 5, paragraphs 0049 and 0054). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the content of Wiser to include the string also embedded directly in the digital file, in order to effectively prevent illegal copying (see Fujiwara, page 5, paragraph 0049).

Although Wiser and Fujiwara disclose watermarks (Wiser, column 7, lines 5-6 and 17-26) and a string embedded in a digital file (Fujiwara, page 4, paragraph 0047; page 5, paragraphs 0049 and 0054), neither Wiser nor Fujiwara explicitly discloses embedding the string multiple times nor in a hidden manner. Stefik discloses a system for controlling use of digital works in which multiple watermarks may be embedded within a digital work, and both visible and invisible (i.e. hidden) watermarks may be used

Art Unit: 2137

(column 8, lines 51-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the content of Wiser and Fujiwara to include the string embedded two or more times, at least once in a hidden manner, in order to increase robustness; that is, even if the visible string(s) is/are somehow removed, the invisible one(s) would remain and still allow control of the digital rights (see Stefik, column 8, lines 55-56).

In reference to Claims 2 and 3, Wiser, Fujiwara, and Stefik further disclose that the string is encrypted (Wiser, column 9, lines 19-20).

In reference to Claim 4, Wiser, Fujiwara, and Stefik further disclose the string being embedded in a human perceptible form (Wiser, column 9, lines 16-18; Fujiwara, page 5, paragraph 0049; Stefik, column 8, lines 51-55).

In reference to Claim 5, Wiser, Fujiwara, and Stefik further disclose a digital watermark (Wiser, column 7, lines 5-6 and 17-26; Stefik, column 8, lines 51-55).

In reference to Claims 6-9, Wiser, Fujiwara, and Stefik further disclose that the file can include text, images, video, and audio (Wiser, column 6, lines 59-60, for text and images; Wiser, column 6, lines 48-52; column 7, lines 4-9 for audio; Fujiwara, for example, page 6, paragraph 0057 for text, images, and audio; Stefik, column 5, lines 35-40, for text, images, audio, and video).

In reference to Claim 10, Wiser, Fujiwara, and Stefik further disclose that the latent value of the string resides in information that would place the purchaser at increased financial risk if known by another (Wiser, column 8, lines 53-56).

Art Unit: 2137

In reference to Claims 11 and 12, Wiser, Fujiwara, and Stefik further disclose a provider string that can be encrypted (see Wiser, column 4, lines 1-4; column 7, lines 27-46; see also column 10, line 60-column 11, line 7).

In reference to Claims 13 and 14, Wiser, Fujiwara, and Stefik further discloses recording the file on a portable medium (see Wiser, column 9, line 53-column 10, line 16).

In reference to Claim 15, Wiser discloses valued content in a computer readable-medium including a digital file having independent value to a provider (column 6, lines 48-52), a digital string having a latent value to a purchaser embedded in a passport that is linked to the digital file (column 8, lines 53-56), and an encrypted provider digital string (see column 4, lines 1-4; column 7, lines 27-46). However, although Wiser discloses that the string is embedded in the passport linked to the file (column 6, lines 44-46), Wiser does not explicitly disclose also embedding the personal information in the file itself.

Fujiwara discloses a system for content delivery in which personal data is embedded in a delivered digital file (page 4, paragraph 0047; page 5, paragraphs 0049 and 0054). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the content of Wiser to include the string also embedded directly in the digital file, in order to effectively prevent illegal copying (see Fujiwara, page 5, paragraph 0049).

Art Unit: 2137

Although Wiser and Fujiwara disclose watermarks (Wiser, column 7, lines 5-6 and 17-26) and a string embedded in a digital file (Fujiwara, page 4, paragraph 0047; page 5, paragraphs 0049 and 0054), neither Wiser nor Fujiwara explicitly discloses embedding the string multiple times. Stefik discloses a system for controlling use of digital works in which multiple watermarks may be embedded within a digital work (column 8, lines 51-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the content of Wiser and Fujiwara to include the string embedded two or more times, at least once in a hidden manner, in order to increase robustness; that is, even if the visible string(s) is/are somehow removed, the invisible one(s) would remain and still allow control of the digital rights (see Stefik, column 8, lines 55-56).

In reference to Claim 21, Wiser discloses a method including acquiring a digital string, embedding the string in a passport that is linked to the digital file (column 8, lines 53-56), and conveying the file to a purchaser (column 9, lines 54-56). However, although Wiser discloses that the string is embedded in the passport linked to the file (column 6, lines 44-46), Wiser does not explicitly disclose also embedding the personal information in the file itself.

Fujiwara discloses a method for content delivery in which personal data is embedded in a delivered digital file (page 4, paragraph 0047; page 5, paragraphs 0049 and 0054). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the method of Wiser to include embedding the

Art Unit: 2137

string directly in the digital file, in order to effectively prevent illegal copying (see Fuiiwara, page 5, paragraph 0049).

Although Wiser and Fujiwara disclose watermarks (Wiser, column 7, lines 5-6 and 17-26) and a string embedded in a digital file (Fujiwara, page 4, paragraph 0047; page 5, paragraphs 0049 and 0054), neither Wiser nor Fujiwara explicitly discloses embedding the string multiple times nor in a hidden manner. Stefik discloses a method for controlling use of digital works in which multiple watermarks may be embedded within a digital work, and both visible and invisible (i.e. hidden) watermarks may be used (column 8, lines 51-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the content of Wiser and Fujiwara to include the string embedded two or more times, at least once in a hidden manner, in order to increase robustness; that is, even if the visible string(s) is/are somehow removed, the invisible one(s) would remain and still allow control of the digital rights (see Stefik, column 8, lines 55-56).

In reference to Claims 22-24, Wiser, Fujiwara, and Stefik further disclose encrypting the digital string (Wiser, column 9, lines 19-20).

In reference to Claim 25, Wiser, Fujiwara, and Stefik further disclose generating a digital watermark (Wiser, column 7, lines 5-6 and 17-26; Stefik, column 10, lines 20-22; column 8, lines 51-55).

In reference to Claims 26 and 27, Wiser, Fujiwara, and Stefik further disclose a provider string that can be encrypted (see Wiser, column 4, lines 1-4; column 7, lines 27-46; see also column 10, line 60-column 11, line 7).

Art Unit: 2137

In reference to Claim 28, Wiser, Fujiwara, and Stefik further disclose recording the file on a portable medium (Wiser, column 9, line 53-column 10, line 16).

In reference to Claims 29 and 30, Wiser, Fujiwara, and Stefik further disclose transmitting the content via a network (Wiser, column 5, lines 43-46).

In reference to Claims 31-33, Wiser, Fujiwara, and Stefik further discloses that the string can be embedded in images, audio, or video (Wiser, column 6, lines 59-60, for images; Wiser, column 6, lines 48-52; column 7, lines 4-9 for audio; Fujiwara, for example, page 6, paragraph 0057 for images, and audio; Stefik, column 5, lines 35-40, for images, audio, and video).

In reference to Claim 34, Wiser, Fujiwara, and Stefik further disclose that the latent value of the string resides in information that would place the purchaser at increased financial risk if known by another (Wiser, column 8, lines 53-56).

In reference to Claim 35, Wiser, Fujiwara, and Stefik further disclose determining the content of the string (Wiser, column 9, lines 11-24).

In reference to Claim 37, Wiser discloses a system including a processor (see, for example, Figure 1, Client System 126; see also column 9, lines 40-52), a storage device (for example, see column 10, lines 50-55), an interface, and content including a digital file (column 6, lines 48-52) and a string embedded in a passport that is linked to the digital file (column 8, lines 53-56). However, although Wiser discloses that the string is embedded in the passport linked to the file (column 6, lines 44-46), Wiser does not explicitly disclose also embedding the personal information in the file itself.

Art Unit: 2137

Fujiwara discloses a system for content delivery in which personal data is embedded in a delivered digital file (page 4, paragraph 0047; page 5, paragraphs 0049 and 0054). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the system of Wiser to include the string also embedded directly in the digital file, in order to effectively prevent illegal copying (see Fujiwara, page 5, paragraph 0049).

Although Wiser and Fujiwara disclose watermarks (Wiser, column 7, lines 5-6 and 17-26) and a string embedded in a digital file (Fujiwara, page 4, paragraph 0047; page 5, paragraphs 0049 and 0054), neither Wiser nor Fujiwara explicitly discloses embedding the string multiple times nor in a hidden manner. Stefik discloses a system for controlling use of digital works in which multiple watermarks may be embedded within a digital work, and both visible and invisible (i.e. hidden) watermarks may be used (column 8, lines 51-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the content of Wiser and Fujiwara to include the string embedded two or more times, at least once in a hidden manner, in order to increase robustness; that is, even if the visible string(s) is/are somehow removed, the invisible one(s) would remain and still allow control of the digital rights (see Stefik, column 8, lines 55-56).

In reference to Claim 38, Wiser, Fujiwara, and Stefik further disclose an output device (Wiser, column 10, lines 1-16; Stefik, column 6, lines 18-22).

In reference to Claims 39 and 40, Wiser, Fujiwara, and Stefik further disclose a connection to a network (Wiser, column 5, lines 43-46).

Art Unit: 2137

In reference to Claim 41, Wiser, Fujiwara, and Stefik further disclose determining the content of the string (Wiser, column 9, lines 11-24).

In reference to Claims 42 and 43, Wiser, Fujiwara, and Stefik further disclose a point of sale machine and a network connection (Wiser, see column 11, lines 8-13).

In reference to Claim 44, Wiser discloses a system including a processor (column 9, lines 40-52), an interface that requests a digital string (column 8, lines 53-56), and a storage device (for example, column 10, lines 50-55). Wiser further discloses embedding the string in a passport that is linked to a digital file (column 8, lines 53-56). However, although Wiser discloses that the string is embedded in the passport linked to the file (column 6, lines 44-46), Wiser does not explicitly disclose also embedding the personal information in the file itself.

Fujiwara discloses a system for content delivery in which personal data is embedded in a delivered digital file (page 4, paragraph 0047; page 5, paragraphs 0049 and 0054). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the system of Wiser to embed the string directly in the digital file, in order to effectively prevent illegal copying (see Fujiwara, page 5, paragraph 0049).

Although Wiser and Fujiwara disclose watermarks (Wiser, column 7, lines 5-6 and 17-26) and a string embedded in a digital file (Fujiwara, page 4, paragraph 0047; page 5, paragraphs 0049 and 0054), neither Wiser nor Fujiwara explicitly discloses embedding the string multiple times nor in a hidden manner. Stefik discloses a method

Art Unit: 2137

for controlling use of digital works in which multiple watermarks may be embedded within a digital work, and both visible and invisible (i.e. hidden) watermarks may be used (column 8, lines 51-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the content of Wiser and Fujiwara to include the string embedded two or more times, at least once in a hidden manner, in order to increase robustness; that is, even if the visible string(s) is/are somehow removed, the invisible one(s) would remain and still allow control of the digital rights (see Stefik, column 8, lines 55-56).

In reference to Claims 45 and 46, Wiser, Fujiwara, and Stefik further disclose a network (Wiser, column 5, lines 43-46).

9. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dwork et al, US Patent 6038316, in view of Fujiwara and Stefik.

In reference to Claim 36, Dwork discloses acquiring a digital string (column 7, lines 40-47), embedding the string in an encryption key (column 7, lines 14-19), encrypting a digital file (column 7, lines 34-37), and conveying the encrypted file to a purchaser (column 7, lines 38-40). However, Dwork does not explicitly disclose also embedding the digital string in the digital file that is encrypted.

Fujiwara discloses a method for content delivery in which personal data is embedded in a delivered digital file (page 4, paragraph 0047; page 5, paragraphs 0049 and 0054). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made modify the method of Dwork to include embedding the

Art Unit: 2137

string directly in the digital file before encryption, in order to effectively prevent illegal copying (see Fujiwara, page 5, paragraph 0049).

Although Dwork and Fujiwara disclose a string embedded in a digital file (Fujiwara, page 4, paragraph 0047; page 5, paragraphs 0049 and 0054), neither Wiser nor Fujiwara explicitly discloses embedding the string multiple times nor in a hidden manner. Stefik discloses a method for controlling use of digital works in which multiple watermarks may be embedded within a digital work, and both visible and invisible (i.e. hidden) watermarks may be used (column 8, lines 51-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the content of Dwork and Fujiwara to include the string embedded two or more times, at least once in a hidden manner, in order to increase robustness; that is, even if the visible string(s) is/are somehow removed, the invisible one(s) would remain and still allow control of the digital rights (see Stefik, column 8, lines 55-56).

Conclusion

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Iwamura, US Patent 7158652, discloses a system for copy protection of digital content that includes embedding personal information as watermarks.

Art Unit: 2137

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ZAD) zad

> EMMANUEL L. MOISE SUPERVISORY PATENT EXAMINER